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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,280	08/30/2001	Shawn R. Getterny	PALM-3675	1896
7590 08/23/2005			EXAMINER	
WAGNER, MURABITO & HAO LLP			WU, XIAO MIN	
Third Floor			ART UNIT	PAPER NUMBER
Two North Market Street			ARTOWI	TATER NOMBER
San Jose, CA 95113			2674	

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/944,280	GETTEMY ET AL.			
Office Action Summary	Examiner	Art Unit			
	XIAO M. WU	2674			
The MAILING DATE of this communication Period for Reply	n appears on the cover sheet wi	th the correspondence address			
A SHORTENED STATUTORY PERIOD FOR R THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 Clafter SIX (6) MONTHS from the mailing date of this communication  - If the period for reply specified above is less than thirty (30) days,  - If NO period for reply is specified above, the maximum statutory p  - Failure to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	ON. FR 1.136(a). In no event, however, may a ron. a reply within the statutory minimum of thirt reriod will apply and will expire SIX (6) MON statute, cause the application to become AB	eply be timely filed  y (30) days will be considered timely.  THS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).			
Status					
1)⊠ Responsive to communication(s) filed on	03 June 2005.				
2a)⊠ This action is <b>FINAL</b> . 2b)□	· · · · · · · · · · · · · · · · · · ·				
3) Since this application is in condition for all closed in accordance with the practice under the condition of the condit					
Disposition of Claims					
4) ☐ Claim(s) 1-7,11-13,18-24,26,27,29 and 31 4a) Of the above claim(s) is/are with 5) ☐ Claim(s) 1-7,11,12,29 and 31-36 is/are all 6) ☐ Claim(s) 13,18-24,26,27,37 and 38 is/are 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction a	ndrawn from consideration. owed. rejected.	cation.			
Application Papers					
9)☐ The specification is objected to by the Exa	miner.				
10) $\square$ The drawing(s) filed on is/are: a) $\square$					
Applicant may not request that any objection to		• •			
Replacement drawing sheet(s) including the control of the oath or declaration is objected to by the					
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of:  1. Certified copies of the priority docur 2. Certified copies of the priority docur 3. Copies of the certified copies of the application from the International But * See the attached detailed Office action for a	nents have been received. nents have been received in Appriority documents have been ureau (PCT Rule 17.2(a)).	oplication No received in this National Stage			
Attachment(s)					
1) Notice of References Cited (PTO-892)	4) Interview S	ummary (PTO-413)			
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-9483)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SI Paper No(s)/Mail Date</li> </ol>		)/Mail Date formal Patent Application (PTO-152)			

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 18 recites the limitation "said portion" in line 2. There is insufficient antecedent basis for this limitation in the claim.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 13, 19, 21-22, 24, 26-27, 38 are rejected under 35 U.S.C. 102(e) as being anticipated by Fishkin et al. (US Patent No. 6,243,074).

As to claims 13, 24, Fishkin further discloses a portable electronic device comprising: a processor (24) coupled to a bus; a display module (30) for displaying information and coupled to the bus; a memory (26) for storing information and coupled to the bus; an electronic muscle material (22, 28) couple to the bus and for use as an input device, wherein the electronic muscle material generates information used by the processor for detecting the placement of user fingers on the electronic muscle material (see Fig. 4) and further wherein the electronic muscle material

grows a plurality of function buttons (see Fig. 34) in the proximity of user's fingers responsive to the detection of the placement.

As to claim 19, Fishkin discloses sound detection by vibration which is equivalent to a microphone (see col. 15, lines 19-34).

As to claims 21,27, Fishkin discloses that the movement of the electronic muscle causes the processor to sense handling by user for determination of left-handedness or right-handedness thereof (col. 3, lines 28-37).

As to claims 22, 38, Fishkin discloses that the electronic muscle generates information used by the processor for detecting the identity of a user (e.g. voice identification, see col. 15, lines 27-33 and Fig. 27).

As to claim 26, Fishkin discloses that the locations of the plurality of buttons (or sensors) are defined based on the displacement of the user fingers on the electronic muscle material. For example, the sensor or button can be placed on the edge of the display or on corner of the display, or on the back of the display for left hand fingers and right hand finger (see Figs. 3, Fig. 9, and Figs. 38, 39, respectively).

#### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 7. Claims 18, 20, 36, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fishkin et al. (US Patent No. 6,243,074) in view of Pelrine et al ("Application of Dielectric Elastomer Actuators").

As to claims 18, 20, 36, 37, it is noted that Fishkin does not discloses the electronic muscle material vibrates at a frequency as specified by the processor for use as a speaker. Pelrine is cited to teach an electronic muscle material vibrates at a frequency as specified by the processor for use as a speaker (see Table 3 of Pelrine). It would have been obvious to have modified Fishkin with the features of the electronic muscle material vibrates for use as a speaker as taught by Fishkin so as to eliminate a speaker and reduce the cost. Furthermore, the location of the speaker or the microphone is considered as an obvious design choice since it would have been obvious to one of ordinary skill in the art to have arranged the location of the speaker or microphone in a proper position within the housing.

8. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fishkin et al. (US Patent No. 6,243,074) in view of Pelrine et al ("Application of Dielectric Elastomer Actuators") as applied to claim13 above, and further in view of Henty (US Patent No. 5,838,138).

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As to claim 23, it is noted that Fishkin as modified discloses the device including a rechargeable battery but fails to disclose the movement of the electronic muscle material cause charging of the battery. Henty is cited to teach a portable computer device which including a mechanical power converter for converting movement of the input device into electrical current to cause charging of the battery (see Fig. 1a, 1b). It would have been obvious to one of ordinary skill in the art to have included a mechanical power converter as taught by Henty into the electronic muscle device of Fishkin as modified, so that the deformation movement of the electronic muscle can generate electrical current for charging the battery, so as to save power.

## Allowable Subject Matter

9. Claims 1-7, 11-12, 29, 31-36 are allowed.

# Response to Arguments

10. Applicant's arguments with respect to claims 13, 18-24, 26-27, 37-38 have been considered but are most in view of the new ground(s) of rejection.

### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

12. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to XIAO M. WU whose telephone number is 571-272-7761. The

examiner can normally be reached on 6:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, PATRICK EDOUARD, can be reached on 571-272-7603. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

x.w.

August 22, 2005

XIAO M. WU

sin W

Primary Examiner

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